HEWLETT **PACKARD**

HEWLETT-PACKARD COMPANY
LOGIC SYSTEMS DIVISION

HP 64000
Logic Development
System

SYSTEM RELEASE BULLETIN

HP STARS II

64000 SOFTWARE RELEASE BULLETIN

UPDATE 88.08A

AUGUST, 1988

This document supersedes all previously dated SSBs.

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READER COMMENT SHEET

STARS II SRB (STARS B)

Issue _____._____ DATE _____/_____/_____

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Is this bulletin technically accurate?   Yes [ ] No [ ]   (If no, explain under Comments, below.)

Are the concepts and wording easy to   Yes [ ] No [ ]   (If no, explain under Comments, below.)
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Is the format of this bulletin convenient in size, Yes [ ] No [ ]   (If no, explain or suggest improvements under
arrangement and readability?   Comments, below.)

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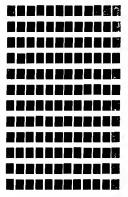
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PREFACE

This Software Release Bulletin documents all fixes and enhancements that
are incorporated in the new release identified on the cover page. The
SRB is provided as a benefit of Hewlett-Packard's Account Management
Support, Response Center Support, and Software Materials Subscription.

Of the five sections contained in the SRB (not including the PREFACE),
only the last section which contains the detailed reports has page num-
bers. These are referenced by the product, report number and keyword
indexes in order to direct the user to a particular area or to an in-
dividual detailed report. The five sections are described below.

SOFTWARE RELEASE CONTENTS

This section lists the product names, numbers and update/fix levels of
all products contained in this release. Products that have changed, or
are new are denoted with an asterisk preceding the product name.

PRODUCT INDEX

Each unique product name/number has an entry listing the page number
where the detailed report for that product begins.

REPORT NUMBER INDEX

This index is a sequential list of the individual report numbers with
the corresponding page number where the report can be found.

KEYWORD INDEX

This index is sorted by product name, keyword, product number (including
the update/fix level) and by report number in that order. In addition
to the sort items, each entry has a brief description (one line) and the
page number where the detailed report can be found. Note that a given
report can be listed more than once in this section if it has more than
one keyword assigned to it.

DETAILED REPORTS

Each report contains all the available information relevant to the
problem being corrected or the enhancement being implemented.

Software release contents

Product name		Product number	uu.ff
*6301V EMULATION	300	64206S004	01.10
*68000 12MHZ EMUL	DOS	64742S006	01.01
*68000 ASSEMB	DOS	64845S006	02.11
*68010 16MHZ EMUL	DOS	64745S006	01.01
*68020 EMUL	300	64410S004	02.10
*80186 EMUL	DOS	64764S006	01.01
*80188 EMUL	DOS	64765S006	01.01
*8086/8 ASSEMB	DOS	64853S006	02.71
*HP TEAMWORK	300	64711S004	02.20
*NETWORK TRANSFER	500	64888S001	01.20
*STATE ANALYZER	300	64620S004	01.30
*USER DEF ASSEMB	DOS	64851S006	02.15
*UTILITIES PKG	300	64888S003	01.50
*UTILITIES PKG	300	64888S004	01.20
*Z80 EMUL	DOS	64753S006	01.01
*Z80 ASSEMB	DOS	64842S006	01.91

Product index

Report number index

Keyword index

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Keyword	Product number	uu.ff	Description	Report #	page
********none********	64745S006	00.00	Enhancement to add the M68010 processor registers	D200087627	2

Keyword	Product number	uu.ff	Description	Report #	page
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	64410S004	02.00	"display trace find..." may not work if the status displayed is absolute	D200086777	4
	64410S004	02.00	Session may abort if fpu disabled in config while displaying fpu regs.	D200086785	4
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	64410S004	02.00	Conflicts may exist between simulated interrupts and SW breakpoints.	D200086819	5
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Keyword	Product number	uu.ff	Description	Report #	page
********none********	64764S006	00.01	Request for Register interface changes.	D200087650	7

Keyword	Product number	uu.ff	Description	Report #	page
********none********	64765S006	00.01	Invalid expressions can corrupt PC memory	D200089821	8

Keyword	Product number	uu.ff	Description	Report #	page
********none********	64711S004	01.00	Better use of laser printers.	5000196048	10
	64711S004	01.00	Need ability to import and export notes to and from HP-UX environment.	D200067371	10
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Keyword	Product number	uu.ff	Description	Report #	page
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Keyword index

Keyword	Product number	uu.ff	Description	Report #	page
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Number: 5000272526 Product: 68000 12MHZ EMUL DOS 64742S006   00.01

One-line description:
Address Specifiers that include "don't care" characters may fail.

Problem:
Address specifiers that include "don't care" characters may
fail to work properly. Example:

When specifying trigger or storage addresses:

  9XXXXXH - captures or triggers on addresses outside 90000H-9FFFFFH
  90XXXXH - captures or triggers on addresses outside 90000H-90FFFFH
  900XXXH - works as expected

Temporary solution:
Use the Terminal interface to specify the trace and execute the
trace.

Signed off 07/11/88 in release A01.01

Number: D200087627 Product: 68010 16MHZ EMUL DOS 64745S006   00.00

One-line description:
Enhancement to add the M68010 processor registers

Enhancement text:
and the m68010 programmatics. The register
additions were vbr, sfc and dfc.

Signed off 07/11/88 in release A01.01

Number: 5000283622 Product: 68020 EMUL   300 64410S004   02.00

One-line description:
Code disp. with trace not right if code changed w/o ending emul. session

Problem:
Source lines displayed with a trace may not be correct if
the code is changed without ending out of the emulation session.
For exanple, a user running is windows does a display trace source
on, and sees a statement: i = 1; in the trace along with the
MOVE.L   #1,D0 that accompanies that source line. The user then
moves to another window, changes the source line to i = 2;, recompiles,
relinks, and runs edbuild. The user then moves back to the emulation
window, reloads the file, and reruns the code and the trace. The
trace shows   MOVE.L #2,D0 as expected, BUT shows i = 1; as the
source line.

   End out of emulation, and reenter before loading the new program
Source lines displayed with a trace may not be correct if
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moves to another window, changes the source line to i = 2;, recompiles,
relinks, and runs edbuild. The user then moves back to the emulation
window, reloads the file, and reruns the code and the trace. The
trace shows   MOVE.L #2,D0 as expected, BUT shows i = 1; as the
source line.

Temporary solution:
   End out of emulation, and reenter before loading the new program
or executing the trace.

Signed off 07/11/88 in release A02.10

Number: D200086769 Product: 68020 EMUL   300 64410S004   02.00

One-line description:
Shared contects are not shown as such in "copy trace_spec" output.

Problem:
Shared contexts are not shown as explicitly shared in the output of the
copy trace_specification... command. Instead, the context spec is
repeated. E. g.

        T_CONTEXT enable after a= 4000h
        ...
        S_CONTEXT enable after a= 4000h

instead of the displayed version:

        T_CONTEXT enable after a= 4000h
        ...
        S_CONTEXT T_CONTEXT

Signed off 07/11/88 in release A02.10

Number: D200086777 Product: 68020 EMUL   300 64410S004   02.00

One-line description:
"display trace find..." may not work if the status displayed is absolute

Problem:
The "display trace find ..." command will fail to locate any pattern
if the trace display currently shows status in absolute form (binary
or hex). There is no problem, however, when source display is also
on.

Temporary solution:
Two Solutions exist:
               -1-
Do a "display trace mnemonic ..."
  or "display trace status mnemonic ..."
before the find command, or
               -2-
simply enable a source display with
        "display trace source on".

Signed off 07/11/88 in release A02.10

Number: D200086785 Product: 68020 EMUL   300 64410S004   02.00

One-line description:
Session may abort if fpu disabled in config while displaying fpu regs.

Problem:
When fpu registers are being displayed repetitively, and then
configuration is modified and the internal fpu is disabled, the
emulation session will automatically "end release" and dump
core.

Temporary solution:
Before modifying configuration to disable the fpu, issue a
display command for something other than registers.

Signed off 07/11/88 in release A02.10

Number: D200086793 Product: 68020 EMUL   300 64410S004   02.00

One-line description:
Erroneous trace data may be shown with "at_execution run" command.

Problem:
If no traces have been taken in the current emulation session, the
commands

    at_execution run ...
    execute

will cause erroneous trace data to be shown. This will not occur if any
traces have been taken.

Display of false data will also occur with the following commands:

    at_execution run ...
    at_execution trace ...
    load trace_specification ... (should cancel pending at_exec trace)
    end (locked or to measurement_system or another module)
    (resume)
    execute (should cause run only)

Taking a trace after the load and before the "end" will prevent this.

Temporary solution:
Workarounds are described in the problem text.

Signed off 07/11/88 in release A02.10

Number: D200086819 Product: 68020 EMUL   300 64410S004   02.00

One-line description:
Conflicts may exist between simulated interrupts and SW breakpoints.

Problem:
Execution of software breakpoints may not be recognized by the emulator
software if simulated interrupts are also being used. This occurs when
the breakpoint is hit at the same time the emulator software is trying
to break to the monitor to initiate a simulated interrupt. Upon
completion of the simulated interrupt, the monitor will return to the
users code, completely ignoring the breakpoint.

If possible, simulated interrupts should be disabled during use of
breakpoints by clearing the simulated interrupt control address either
from the softkeys (using modify memory) or in the user code.

Temporary solution:
If possible, simulated interrupts should be disabled during use of
breakpoints by clearing the simulated interrupt control address either
from the softkeys (using modify memory) or in the user code.

Signed off 07/11/88 in release A02.10

Number: D200086827 Product: 68020 EMUL   300 64410S004   02.00

One-line description:
Long trace sequence name (gt 8 characters) is not flagged properly.

Problem:
Names used in analysis sequence specifications are limited to eight
characters in length. Longer names are automatically truncated
by the software with no warning to the user. This might cause
confusion if the user recalls and modifies a command on the command
line since the software will not recognize the long name in a
subsequent "modify" command.

Temporary solution:
Only names of 8 or less characters should be used in the sequencer.

Signed off 07/11/88 in release A02.10

Number: D200090530 Product: 68020 EMUL   300 64410S004   02.00

One-line description:
bbaunload causes memory growth problems in emulators

Problem:
Detailed Listing for Defect Number LSDqf03808
Text:
    bbaunload causes memory growth problems in emulators

.submitter

The bbaunload library (/lsd/p2/cmd/bba/prod/unload) allocates
memory and never frees it.

                                        Bruce E
FIXED:
The new library fixes these problems as well as making the whole
unload process much faster. It is fixed as of 03June88.

Signed off 07/11/88 in release A02.10

Number: D200087650 Product: 80186   EMUL DOS 64764S006   00.01

One-line description:
Request for Register interface changes.

Problem:
Register function interface ENHANCEMENTS:

1.   Changed the size of the register number and class number
     from a u_int8 to a u_int16.

2.   Changed the dataarray from a u_int32 * to an intn *.

3.   Added the register attributes:
     regtype, intntype, and intnsize and removed the attributes
     type, and size.

4.   Added the pcaobj element to the readregclstruct structure.

Signed off 07/11/88 in release A01.01

Number: D200089821 Product: 80188   EMUL DOS 64765S006   00.01

One-line description:
Invalid expressions can corrupt PC memory

Problem:
Detailed Listing for Defect Number LSDqf03471
Text:
   Invaild expressions can corrupt PC memory.

.submitter

If two syntactically incorrect expressions are entered one after the
other, PC memory may be corrupted. Data could be corrupted; the
interface could hang.

The invalid expressions could be entered in any address or data
expression in the PC interface.

resp engr: Harold Shaw

.labnotes

Whenever cefree() is called with a pointer, it frees the space
but does not set the pointer to NULL. If a global variable is
passed to cefree(), it may free space that has already been freed.

Jeff Downs

.workaround

Be sure that expressions are syntactically correct.

Signed off 07/11/88 in release A01.01

Number: D200070060 Product: HP TEAMWORK   300 64711S004   01.00

One-line description:
Won't open Data Flow Diagram

Problem:
When working on a DFD, the ERROR MESSAGE:"ERROR: This mode has not been
configured for real time objects. your DFD has been opened for READ.
see your SA", intermittently occurs... More prevelent when another
Pisces II product is running.

Signed off 10/09/87 in release 402.20

Number: D200076505 Product: HP TEAMWORK   300 64711S004   01.00

One-line description:
I/O timing loops are machine dependent.   350 runs much faster than 320.

Problem:
Timing loops for items like "waiting for a key entry" are machine
dependent. Hence, they usually run much faster on a 350 than a 320.
This will make things like "repeat a character" when a key is held
down happen much faster.

Temporary solution:
None at this time.

Signed off 10/09/87 in release A02.20

Number: D200076521 Product: HP TEAMWORK   300 64711S004   01.00

Keywords: CUSTOMIZE

One-line description:
Should keep the manual pages if /usr/man/man1 doesn't exist.

Problem:
If one is doing a custom installation where hptwk isn't being
installed under /usr/hp64000/...., it is quite possible that
the user has removed /usr/man/man*. If this is the case, the
customize script should leave the man' pages alone and not remove
them from $PWD/usr/man/man1 as it presently does.

Signed off 10/09/87 in release A02.20

Number: D200076968 Product: HP TEAMWORK   300 64711S004   01.00

One-line description:
Title changes do not 'filter down' to lower levels.

Problem:
Changing the title of a SC in a process index does not change the
title in the box in the SC.

Temporary solution:
None at this time.

- -P

Signed off 10/09/87 in release 402.20

Number: D200078717 Product: HP TEAMWORK   300 64711S004   01.00

One-line description:
FILES MISSING WHEN 64702 IS INSTALLED WITHOUT THE 64711 FILESET

Problem:
When the 64702 fileset is loaded on a machine without the 64711 fileset,
two files required by the 64702 must be copied from a machine that has
the 64711 fileset loaded. They are /usr/hp64000/hptwk/twk/install/insta
ll.msg

and /usr/hp64000/hptwk/twk/config_file. These files must be copied to
the machine where the 64702 fileset was loaded or the following error me
ssages
result:
    NO_TWK_INSTALL_MSG1_FILE
    CANNOT_OPEN_CONFIG_FILE

Temporary solution:
The two files required by the 64702 must be copied from a machine that
the 64711 fileset loaded. They are:
    /usr/hp64000/hptwk/twk/install.msg
and /usr/hp64000/hptwk/twk/config_file. These files must be copied to
the machine where the 64702 fileset was loaded.

Signed off 10/09/87 in release 402.20

Number: 5000196048 Product: HP TEAMWORK   300 64711S004   01.00

One-line description:
Better use of laser printers.

Problem:
USING A LASERJET-PLUS TO PRINT RESULTS IN HARDCOPY USING ONLY
1/4 OF A PAGE INSTEAD OF THE WHOLE PAGE. THIS RESULTS IN LARGE
DFD'S BEING VERY DIFFICULT TO READ AND HURTS HP'S CLAIM THAT
WE HAVE "THE BEST PERIPHERAL SUPPORT" . THE HP74200 "EDS"
PRODUCT HAS NO PROBLEM WITH FULL PAGE LASER PRINTOUTS.

Temporary solution:
None.

Signed off 10/23/87 in release 402.20

Number: D200067371 Product: HP TEAMWORK   300 64711S004   01.00

One-line description:
Need ability to import and export notes to and from HP-UX environment.

Problem:
Customer would like to be able to create notes using an editor
in HP-UX and then import them into HP Teamwork. This option
is available in the P-spec body pull-down menu with the "Paste Body
from file" menu selection. There should also be a selection "Write
Body to File" to export notes into the HP-UX environment.

- -P

Signed off 10/09/87 in release 402.20

Number: D200076992 Product: HP TEAMWORK   300 64711S004   01.00

One-line description:
Wrong date displayed by load_twk.

Problem:
load_twk displays all the parameters it was invoked with and
the date of "Wed Dec 31 16:59:59 1969".

Signed off 10/09/87 in release 402.20

Number: D200076687 Product: STATE ANALYZER   300 64620S004   01.10

One-line description:
State Pv causes cardcage IMB to latch.

Signed off 07/11/88 in release A01.30

Number: D200082388 Product: STATE ANALYZER   300 64620S004   01.10

One-line description:
Processes sometimes left running after parent has stopped.

Problem:
Sometimes, when the parent process to a measurement system is killed
some of the measurement systems processes are left running.   Please
change the behaviour of the products so that these processes die
nicely.

Temporary solution:
If the tty associated with the process is a pty, then you can
release the processes by
        cat < ptyxx
This causes the pending output to be flushed, and the processes will die
naturally.

Signed off 07/11/88 in release A01.30

Number: D200082487 Product: STATE ANALYZER   300 64620S004   01.10

One-line description:
Display symbol shows "symb not found" when showing sym within process.

Signed off 07/11/88 in release A01.30

Number: D200087528 Product: STATE ANALYZER   300 64620S004   01.10

One-line description:
State does not yet support the system II "set" command

Signed off 07/11/88 in release A01.30

Number: 5000259838 Product: UTILITIES PKG   300 64888S004   01.10

One-line description:
Xlate cannot convert the file with address 0FFFFH

Problem:
Xlate can not convert the file including address 0FFFFH.
Xlate generates error "xlate: invalid address, address too large
for processor".

 Example: "tem"
           "8085"
                    ORG   0FFFFH
                    DB   "A"

 After made absolute file, excuted " xlate -t ih80 -f tem.X ".
 Error occured. The message is discribed above.

Temporary solution:
No temporary solution at this time.

Signed off 07/11/88 in release A01.20

Number: 5000185447 Product: UTILITIES PKG   300 64888S004   01.00

Keywords: ENHANCEMENT

One-line description:
Desire ability to control the length of S-Records output from 64888.

Problem:
This SR is submitted against 64888 Transfer Utility Package, but since
the product is not loaded in the database yet, I used the 68010 linker
part number.

Customers using the 64888 Transfer Utility Package need the capability
to control the length of the S-records that are being output from xlate.
Motorola standards say that the records may be of any length up to 255
bytes, and the xlate utility will output records that are consistantly
255 bytes if necessary and then fill the last record with the remainder.
However some older microprocessor systems were designed with a fixed
length S-record scheme. For example the 64100 terminal emulator upload
function outputs S-records that are 28 bytes in length including header
information, checksum and data. I have a target system that has been
designed with this scheme in mind and consequently expects S-records to
be of this length. Therefore to accomodate older systems an enhance-
ment to the xlate command that allows record length specification would
be greatly appreciated.

Signed off 07/11/88 in release A01.20

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